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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,739	09/25/2006	Kazuo Tagawa	07481.0044	6221
22852	7590	09/03/2009		
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER VASISTH, VISHAL V	
			ART UNIT	PAPER NUMBER
			1797	
			MAIL DATE	DELIVERY MODE
			09/03/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/565,739

**Applicant(s)**

TAGAWA ET AL.

**Examiner**

VISHAL VASISTH

**Art Unit**

1797

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 4-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicants' amendment filed 5/8/2009 amended independent claim 1 and dependent claims 4-9, cancelled claims 2-3, and added new claims 10-16. Dependent claims 4-9 were amended to clarify claim language and did not change the scope of the claims. Applicants' amendment overcame the 35 USC 102 rejections over Seiki and Kawahara and the 35 USC 103 rejection over Kawahara. Applicants' amendments did not overcome the 35 USC 103 rejection over Kawahara in view of Shimomura. Applicants did not file a terminal disclaimer and therefore the double patenting rejection from the office action mailed on 12/8/2008 is maintained below with adjustments for the cancelled and new claims. New grounds of rejection necessitated by the amendment are set forth below.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

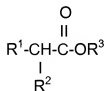
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1 and 4-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al., US Patent No. 6,667,285 (hereinafter referred to as Kawahara). The examiner notes that this is the US national phase application (therefore in English) of WIPO application No. WO/2000/068345 which is in Japanese but does have a 102(b) date in view of Shimomura et al., US Patent No. 6,228,282 (hereinafter referred to as Shimomura).

Kawahara discloses a lubricating oil composition for refrigerators comprising hydrocarbon oils (prescribed base oil as recited in claims 1 and 10) (Col. 3/L. 39), antiwear agents such as tricresyl phosphate (phosphorus-based extreme pressure agent as recited in claims 1, 10 and 12) and at least one aliphatic saturated branched-chain carboxylic acid monoalkyl ester represented by the formula:



wherein when  $\text{R}^2$  is hydrogen,  $\text{R}^1$  is a branched-chain alkyl and  $\text{R}^3$  is  $\text{C}_1\text{-C}_{20}$  straight-chain alkyl monoesters of a monobasic fatty acid having 12 or more carbon atoms and a monohydric alcohol having 1-24 carbon atoms (oil agent of claim 1 and ester oil agent as recited in claim 5 and linear dibasic acid and monohydric alcohol of claims 6-7, 10 and 14) (Col. 2-3/L. 64-15).

The composition of Kawahara may further contain other base oils such as alicyclic dicarboxylic acid esters esterified by monohydric alcohols (esters of alicyclic dibasic acids and monohydric alcohols as recited in claims 9 and 16) (Col. 14/L. 21-26 and Col. 15-16/L. 55-3) and epoxy compounds in order to improve thermal and hydrolytic stability (epoxy compound as recited in claims 4 and 13) (Col. 20/L. 59-68).

Kawahara further that the ratio of aliphatic saturated branched-chain carboxylic acid monoalkyl ester to hydrocarbon oil is 0.5:99.5 wt% to 99.5:0.5 wt% (which overlaps with the range as recited in claims 8 and 15).

Kawahara discloses all of the limitations as applied to claim 1 as discussed above. Kawahara discloses antiwear agents which include phosphate and phosphite compounds, and Kawahara further discloses the use of sulfur-based additives. Kawahara, however, does not explicitly disclose the use of a phosphorothionate and a phosphorus additive apart from the phosphorothionate.

Shimomura discloses a refrigerator oil composition comprising an alicyclic polycarboxylic acid ester compound, an epoxy compound and additives which improve wear resistance and load capacity such as phosphoric esters (phosphorus compound) and sulfur compounds to further improve wear resistance and load capacity such as phosphorothionates (as recited in claims 1 and 11-12) (Col. 7-8/L. 16-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the composition of Kawahara with the phosphorothionates of Shimomura in order to enhance the wear resistance and load capacity of the composition (Col. 8/L. 18-20 of Shimomura).

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1, 5-12 and 14-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10-18 of copending Application No. 10/566,494. Although the conflicting claims are not identical, they are not patentably distinct from each other. The copending application claims a refrigerating machine oil composition comprising a base oil and at least one ester additive selected from esters of monobasic fatty acids having 12 or more carbon atoms and monohydric alcohols having 1-24 carbon atoms or esters of linear dibasic acids and monohydric alcohols. Wherein the base oil contains at least one of an esters of monobasic acids and monohydric alcohols or esters of linear dibasic acids and

monohydric alcohols. Also, there is sulfur-based additive which is a phosphorothionate and another phosphorus compound is used in the composition that is separate from the phosphorothionate. The ester additive is present in the range between 0.01-10 wt% based on the total weight of the composition and further comprises a polyalkylene glycol which can be used as a secondary base oil. The instant application recites a refrigerating machine oil composition comprising the same base oil with the same additives present in the same percentages but further comprising an epoxide and does not comprise a polyalkylene glycol. The epoxide would have been obvious as a thermal stabilizer.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara.

### ***Response to Arguments***

7. Applicants' arguments filed on 5/8/2009 with respect to claims 1 and 4-16 have been considered and are not persuasive.

Applicants argue that Shimomura does not explicitly disclose the combination of a phosphorothionate and a phosphorus-based extreme pressure agent as recited in the instant claims. This argument is not persuasive. Shimomura in column 7, lines 16-26, explicitly discloses the presence of at least one phosphorus compound in order to improve wear resistance and load capacity. Shimomura goes on to disclose specific examples of phosphorus compounds that may be present in the composition. Shimomura further discloses the addition of sulfur-containing additives to further

enhance wear resistance and load capacity which include phosphorothionates represented by formula (4) in Shimomura and corresponds to the formula for phosphorothionates recited in paragraph 0123 of the instant specification. One of ordinary skill in the art would envisage using both the phosphorus and sulfur-containing additives of Shimomura in a single composition from the disclosure of Shimomura.

Applicants argue that the present invention provides unexpected results and provide data in the specification that allegedly supports the applicants' position. However, the data submitted is not commensurate with the scope of the claims. For example, the inventive base oils in Tables 83-94 of the instant specification recite base oils that are very specific such as tetraester of pentaerythritol and an equimolar mixture of 2-ethylhexanoic acid and 3,5,5-trimethylhexanoic acid amongst others, wherein the base oils have specific kinematic viscosities and pour points. Furthermore, the base oils are present in specific concentrations based on the concentration of additives in the lubricant composition.

Also, the phosphorothionate additives recited in Tables 83-94 include very specific triphenyl phosphorothionates present in a very specific concentration of 0.5 wt%. The same can be said regarding the phosphorus-based extreme pressure agent other than the phosphorothionate, which in Tables 83-94 is a tricresyl phosphate also present at a concentration of 0.5 wt%.

Furthermore, the oil agent recited in Tables 83-94 is a very specific compound that includes butyl stearate amongst others and is also present in a very specific concentration of 0.5 wt%.



Finally, Tables 83-94 recite the presence of a refrigerant which is also not reflected in the claims of the instant application. For the reasons stated above the claims are not commensurate in scope with the data provided and therefore unexpected results have not been demonstrated.

### ***Conclusion***

8. There were X references disclosed in the PCT search report that was part of the file wrapper (filed 7/14/2009) to this application that were unused. This is because the references used were sufficient to reject the claims.

9. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VISHAL VASISTH whose telephone number is (571)270-3716. The examiner can normally be reached on M-R 8:30a-5:30p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571)272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ellen M McAvoy/  
Primary Examiner, Art Unit 1797

VVV